



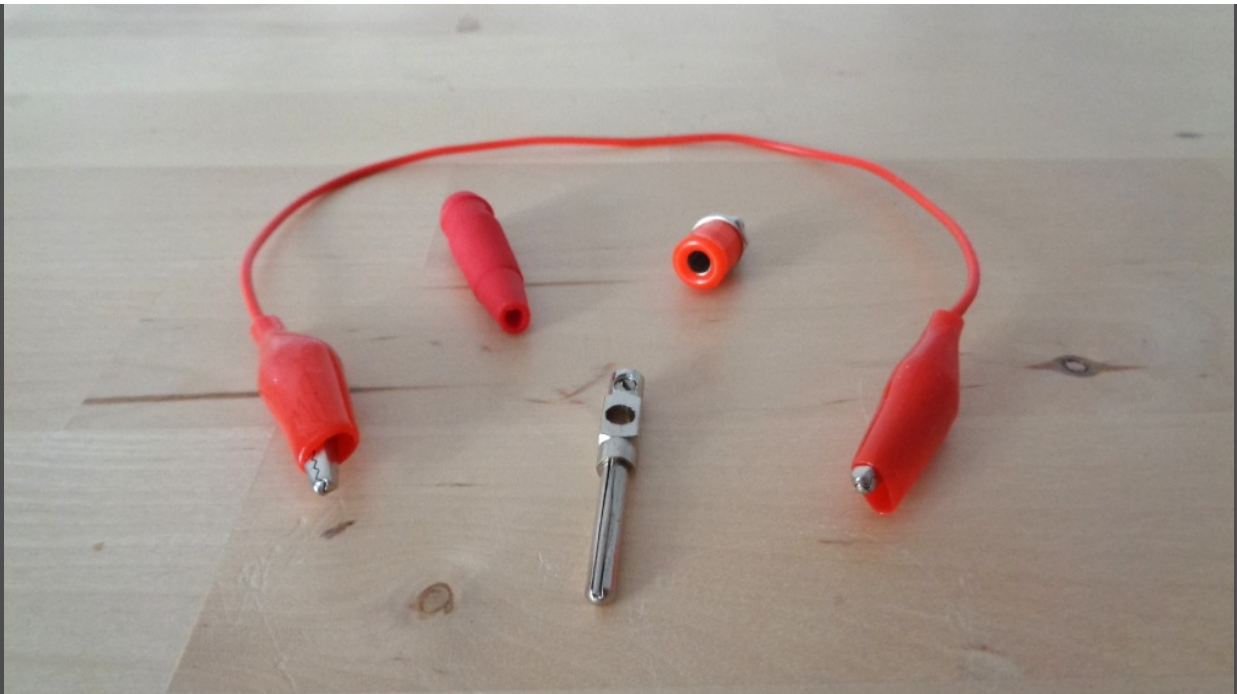
Banana Crocodile Clamp

Preface

Sometimes you want to rebuild something because it's a good idea. But then it can quickly happen that you don't have certain parts you need in stock in spite of a large stock. So I had for example only [crocodile clips](#) which were connected with a cable. In addition [banana connectors](#) without cables and lab sockets (female banana connector). Now I needed for a project a cable with a crocodile clamp on one side and a banana connector on the other side. I couldn't buy the needed parts in the city center and ordering them online would take too long. If you work with electrical components you often have to improvise and find a new solution. In this short tutorial I would like to show you how to do something like this and why the above mentioned components are suitable from the beginning.

Materials





For this project we do not need so many tools.

- Banana Connector (male/female)
- Crocodile Clamp
- Wire Stripper
- Scissors
- Screwdriver

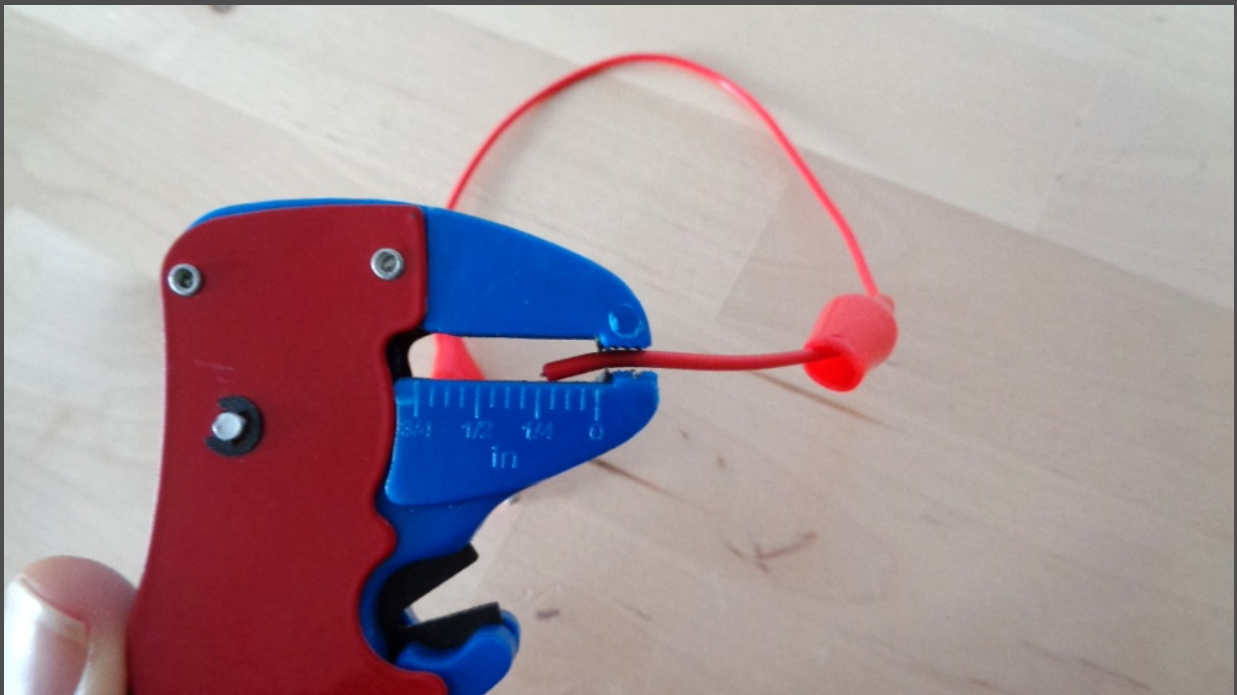
Building



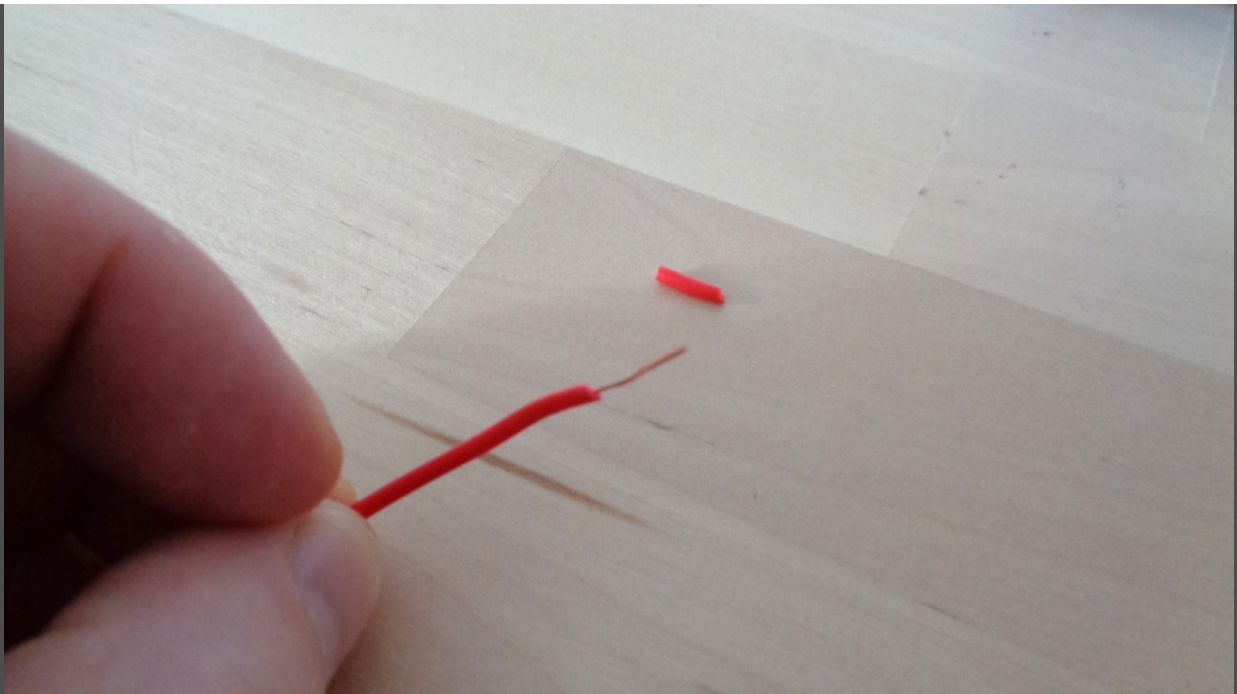
First we remove the protective cover from the crocodile clamp. This is not cut or completely removed, because we can reuse it.



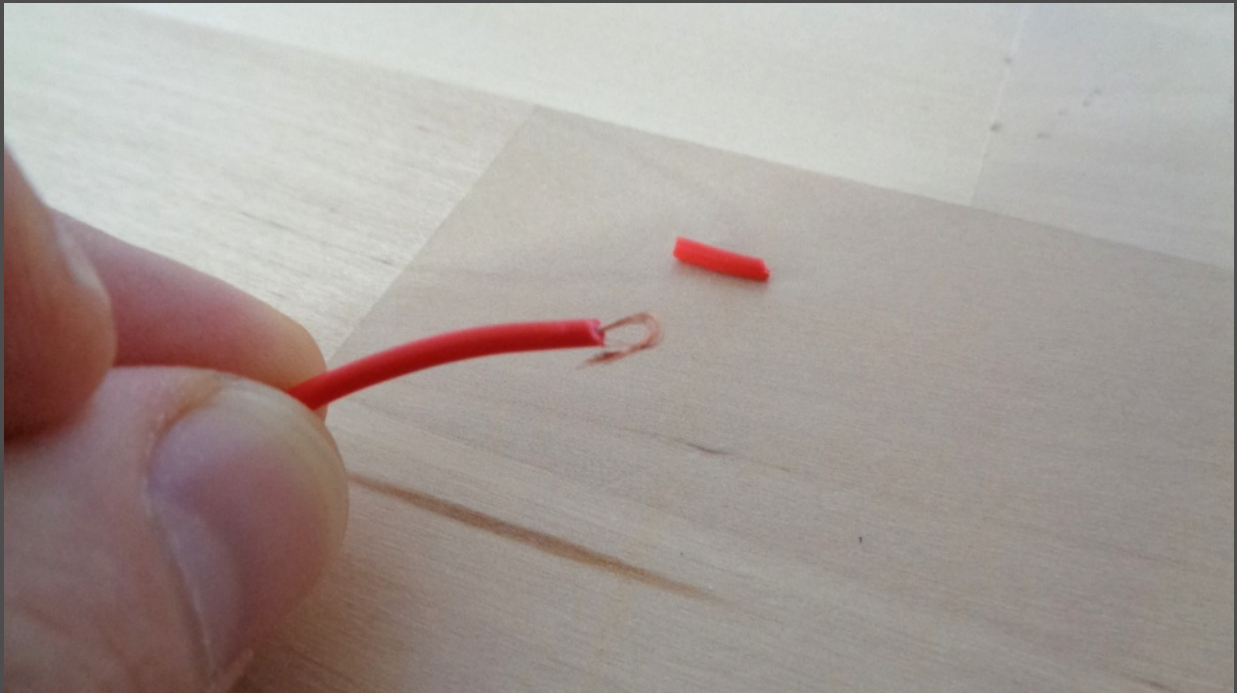
With sharp scissors we cut the metal clip at one end. We do this as close as possible to the metal so that our cable is not cut too short.



With a wire stripper we pull the cable bare.



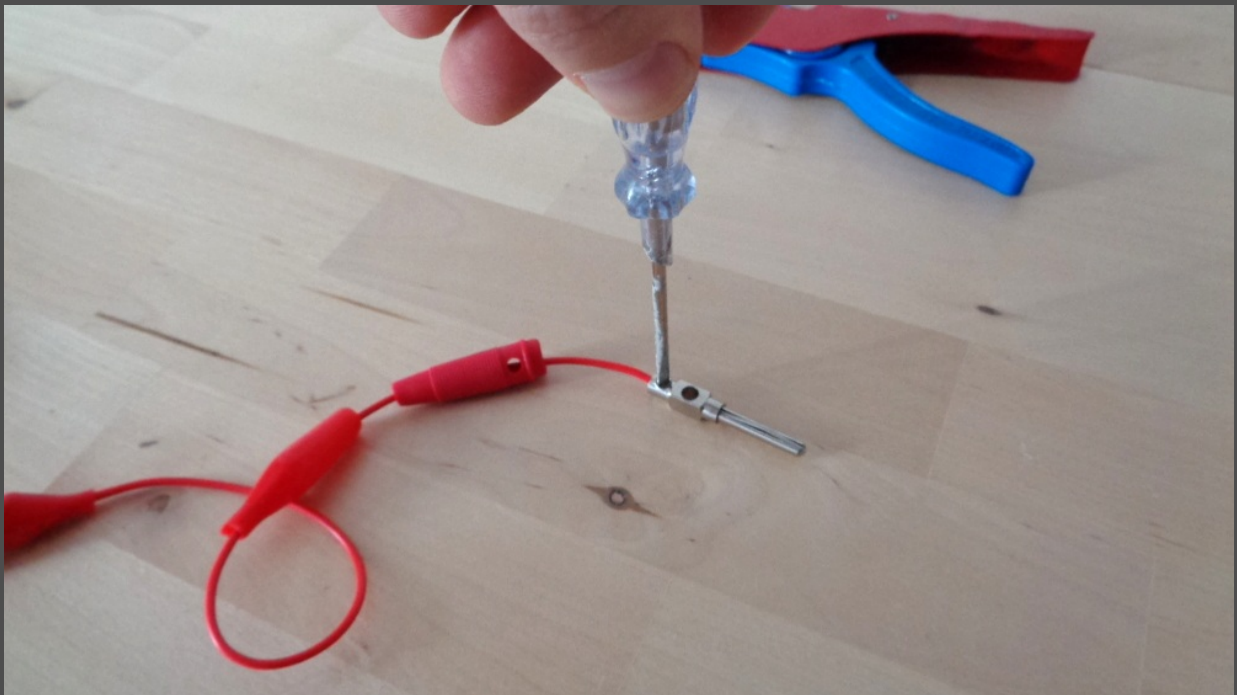
We twist the individual copper wires by taking them between our thumbs and index finger and pressing them together lightly. When pressing, we turn all the individual wires in one direction so that they hold together better. We do not use pliers, because otherwise the thin wires can tear off too quickly. The fingers are the better tools in this case.



The twisted wires are now bent into a small loop. This allows the screw to grip the wire better and makes it more durable.



Now slide the cap of the banana connector onto the cable. Please pay attention to the picture, it doesn't work the other way around.



Now we screw the metal tip of the banana connector to the cable, tightening the screw as tight as possible.



Now push the cap of the banana connector back onto the metal tip.



Now we push the protective cover over the cap and can plug the new plug into the laboratory socket. We now have a modified crocodile clip cable with a banana connector end.

Conclusion

Of course this is not a new idea for experienced hackers, but I want to address young people on my site. In Germany you learn a lot of things in the training which will be passed on from the master to his students. In most countries these strict trainings don't exist and you learn them from friends, colleagues or by trying them out (both have advantages and disadvantages). You should always take the trouble to discover things and tricks by yourself, but certain techniques that are needed again and again can be learned. Thus you can build on the work of your predecessors and reach your goal faster. In this way information is passed on to the next generation and only in this way can mankind continue to develop. What seems trivial for one person can be a completely new experience for another. Therefore I would like to address all levels of electrical engineering hackers and not only publish *full epic master* projects.